

Commonwealth of Kentucky
Division for Air Quality
COMMENTS AND RESPONSE
ON THE DRAFT PERMIT

Kingsford Mfg. Co. (KMC) provided comments regarding the draft Title V permit and statement of basis for their charcoal manufacturing plant in Burnside, Pulaski County, Kentucky. Comments are provided below on the Application Summary Form, the Statement of Basis, and the Draft Permit.

Application Summary Form:

The “Potential” emission rates shown in the Emissions Summary are different from the rates provided by KMC on Table 3-1 of the May 2008 Title V renewal application. In particular, the VOC emission rate of 494 tpy shown on the table appears to be too high. KMC estimated potential VOC emissions to be approximately 215 tpy in the Title V renewal application based on the allowable VOC emission rates for the STB process and for the ACC.

Division’s response:

The Division concurs and has revised the application summary form

Statement of Basis:

1- The description of the dryers provided on page 2 of 8 under E. Unit 09 Dryer C should state that “Dryers A, B and C receive heat from ACC waste heat or from a 55 MMBtu/hr fuel oil burner”. The description does not refer to the primary heat source, the waste heat from the ACC and lists a 50 MMBtu/hr burner.

Division’s response:

The Division concurs and has revised the Statement of Basis to reflect the change.

2- The description states that the “wet wood dryer has been replaced with a new rotary dryer of higher capacity”. This is not correct –the dryer was replaced with a unit of identical capacity.

Division’s response:

The Division concurs and has made the corrections.

3- KMC requests that the performance testing requirements be revised in the permit by removing the term “concurrently” for the ACC, briquet dryers and briquet coolers. KMC will test the ACC stack (EU-02) concurrently with the briquet dryer stacks (EU-07, EU-08 and EU-09) but proposes to test the briquet cooler stacks (EU-03, EU-04, and EU-038) separately, during the same performance test program but not concurrently with the other stacks. We request this revision because the briquet cooler emissions are not directly related to the ACC stack emissions, as are the briquet dryers which receive heat from the ACC. The briquet coolers use ambient air to cool the briquets following the drying process. In addition, testing seven (7) stacks concurrently requires extensive stack testing personnel and equipment which imposes an unnecessary burden on the test program.

Division's response:

The Division contacted and discussed this matter with Mr. Mike Young of KMC on October 2, 2008. The ACC unit will be tested concurrently with the dryers and the coolers tested the day after the ACC testing, using identical processing or production rate of briquettes from the dryer.

4- KMC requests that KY DEP clarify the performance testing requirements pertaining to emission unit 37 (STB process). It is KMC's understanding that DEP is requiring the STB process to be operating during the performance test, with VOC emissions from the STB application area ducted to the ACC. KMC further understands that the VOC compliance testing of the ACC stack and demonstration that the ACC VOC hourly limit of 7.13 lb/hr is met will demonstrate compliance with the STB process VOC emission limits.

Division's response:

The Division concurs, provided the VOC hourly rate is from the STB production line stays 3.3 lb/hr or 10.8 tons per year as established in the permit.

5- Statement of Basis –Typographical Errors:

On page 4 of 8, third paragraph from the top, the emission factor units for CO should read "lb/hr" and not "lb/ton". Also, the CO emission rate should read "0.55 lb/hr" and not "0.056 lb/ton".

Division's response:

The Division concurs and has made the corrections.

On pages 5, 6 and 8 of 8, under EU-06, EU07, EU-08, EU-10, and EU-38, KMC requests that the phrase "For compliance demonstration with..." be used instead of "For compliance with..."

Division's response:

The statement of basis has been revised to reflect the suggestions.

On page 8 of 8, under "Insignificant Activities", the description of the two 40 MMBtu/hr burners should be changed from "Dry Heat Burners" to "ACC Burners". Note that the "Dry Heat Burner" is the 55 MMBtu/hr fuel oil burner identified as an "auxiliary burner" for the briquet dryers.

Division's response:

The statement of basis has been revised to reflect the suggestions.

Draft Permit:

6- *Draft Permit .Page 4 of 48* The "Description" for the EU-02 Auxiliary Burners should be revised: (1) the two 40 MMBtu/hr oil burners are associated with the ACC, not the furnace; and, (2) the six 1.5 MMBtu/hr burners are associated with the furnace, not the dryer, and are propane-fired not natural gas-fired. Also, the description of the "Control Equipment" should be revised to delete the phrase "which 80% gas streams from dryers' auxiliary burner (55 MMBtu/hr fuel oil burner)". This description is inaccurate: 100% of the cyclone exhaust gases are combined in the ACC.

Division's response:

The editorial errors have been corrected in the permit as requested.

7- *Draft Permit –Page 5 of 48* KMC requests that the description of the ACC heat supply damper in (a)(6) be revised to delete reference to a "guillotine-style" damper. KMC is planning to replace the existing damper with a butterfly-style damper and would prefer that the type of damper not be specified in the permit.

Division's response:

The editorial error has been corrected in the permit as requested.

8- Draft Permit –Pages 6, 9, 11, 18, 21, 23, and 32 of 48 Under “Testing Requirements” for emission units 02, 03, 04, 07, 08, 09, and 38, KMC requests that the term “concurrently” be deleted from the testing requirements consistent with our comments in item (4) above. Alternatively, KY DEP could specify that “Testing of the briquet coolers (emission units 03, 04, and 38) can be conducted separately and not concurrently with testing of the ACC and briquet dryers”. In addition, KMC requests that emission unit 37 (STB operations) be deleted from these conditions because measuring flowrate (EPA Method 2A as specified under EU-02), and particulate matter (EPA Method 5 as specified under EU-03, EU-08, etc.) does not appear to be relevant for the STB operation.

Division's response:

For the testing modification, see response to comment #3 under statement of basis.

The reference to a method to the STB operations has been deleted.

9- Draft Permit –Pages 10, 12, 14, 16, 18, 21, 23, and 32 of 48 KMC requests that the “Specific Recordkeeping Requirements” for the briquet dryers and coolers be revised to specify “dry packaged briquets” instead of “dry briquets”. KMC tracks production rates of briquets on a dry packaged basis and would therefore prefer the permit reference the term “packaged”.

Division's response:

The permit has been revised to include ‘packaged’ as requested.

10- Draft Permit –Page 17 of 48 KMC requests that the “Description” be revised by deleting the phrase “and with 20% stream heat flow from ACC” from the description of the “Auxiliary Burner”. Some of the ACC waste heat is used to provide the heat necessary for all three briquet dryers during normal operations. The auxiliary oil burner is used as a back-up heat source when the ACC is not in operation. The estimated ACC waste heat fraction used in all three dryers combined is 20% of the total ACC exhaust gases.

Division's response:

The unit description in the permit has been corrected accordingly.

11- Draft Permit –Pages 9, 11, 18, 20, 22 and 31 of 48. KMC requests that the phrase “as demonstration of compliance” be used instead of “to demonstrate compliance” in the “Compliance Demonstration Method” sections on pages 9 and 11. KMC also requests that the phrase “for compliance demonstration with” be used instead of “for compliance with” in the “Compliance Demonstration Method” sections on pages 18, 20, 22, and 31.

Division's response:

The suggested changes have been made in the permit as requested.

12- Draft Permit –Page 29 of 48 KMC requests that the new phrase “during all the operating time” be removed from condition 1(g) for the STB operation. In the 1998 PSD application, KMC estimated elevated VOC emissions for short periods of time during ACC upsets. KMC committed to shutting the SIB operation down as soon as practicable in the event of an ACC upset, but estimated that elevated VOC emissions could occur for up to 8 hours following an upset. Safety and fire code considerations require KMC to continue to operate the STB fume exhaust following an ACC upset to ensure fumes do not build up in the STB solvent application area. Maximum VOC emissions during ACC upset conditions were estimated based on worst-case annual operating hours of 280/year.

Division's response:

The Division concurs and has deleted "during all the operating time".

13- Draft Permit – Page 30 of 48 KMC requests clarification regarding the "Testing Requirement" specified for the SIB process. See item (4) for our understanding regarding the testing requirements pertaining to STB. KMC trusts that these comments will be addressed when the permit is finalized. Please feel free to contact me at (606) 561-2200 if you have any questions regarding our comments on the draft Title V permit for the Bumside plant.

Division's response:

See Division's response to comment 4 above.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.